

Seqlisting-38-21(52288)B.txt
SEQUENCE LISTING

<110> Hillyard, Jeanna
Roberts, James
Ye, Minwei

<120> Cotton Event PV-GHBK04 (757) and Compositions and Methods for
Detection Thereof

<130> 38-21 (52288)B

<150> US60/249,757

<151> 2000-11-17

<160> 21

<170> PatentIn version 3.0

<210> 1

<211> 20

<212> DNA

<213> artificial sequence

<220>

<221> misc_feature

<222> (1)..(20)

<400> 1

gtttgcttgg acactgatag

20

<210> 2

<211> 20

<212> DNA

<213> artificial sequence

<220>

<221> misc_feature

<222> (1)..(20)

<400> 2

aaaccctttc tggaaaaata

20

<210> 3

<211> 20

<212> DNA

<213> Gossypium hirsutum

<220>

<221> misc_feature

<222> (1)..(20)

<400> 3

tgttctgtgg aaaaggaagg

20

<210> 4

<211> 20

<212> DNA

<213> Gossypium hirsutum

<220>

<221> misc_feature

Seqlisting-38-21(52288)B.txt

<222> (1)..(20)

<400> 4

atgcctgcag gtcaattcaa

20

<210> 5

<211> 138

<212> DNA

<213> artificial sequence

<220>

<221> misc_feature

<222> (1)..(138)

<400> 5

acactgatag tttaaactga aggcgggaaa cgacaatctg atcccagctt gcatgcctgc 60

agggtcaattc aatattgtgg caggacattg ctacatgata cctcttagaa ttgttttagac 120

ttcagatcga tcttgtca 138

<210> 6

<211> 767

<212> DNA

<213> Gossypium hirsutum

<220>

<221> Unsure

<222> (1)..(767)

<223> 5' cotton (Gossypium hirsutum) genome sequence

<400> 6

gtcccggggg cttatcctgt attcatttgc acccacataa acagccaaat taaccaaacc 60

catattcaac tgaaactccc aaagccattc ctacttttagc ttttcaccca ctaactcaaa 120

agaaaacact cacctagctt ctttgctttt tcttttggat tgttttagat ctacaaaaag 180

atgattcaag aactccttgg aggttcttct tgcttaaact ttggagggga gaggaagatc 240

tccatcaatg gaagcatttt ggaaggaacc cccacttctt ctccatcacc atcatcttct 300

tcttcttggg cgacgacttc atcgaccact aattcatcga atccggagaa tcatcaccag 360

aatttgaggt gcccaggtg tgattcctcc aacacaaagt tctgctatta caacaactac 420

aacctcactc agcctcgtca cttttgcaag acttgccgtc ggtattggac caaaggagga 480

gctctcagaa acgttcctat tgggtgggtggg tgtaggaaaa acaaaagcac tactgggtgtt 540

tcaacatctc tggggaaatc aacttcttcc aagatgaaaa cagtagtttc tgaaattgga 600

agatctgggt tcgatcatga gcttcagtct actccaattc tttggacttc agcggcccag 660

acttcccata ttctatccaa tctaacctca atgagagcta ccctaaacct taaccctaac 720

acattgtcta accctgtagg tattaaggaa gaagtgagtt tgcttgg 767

<210> 7

<211> 206

Seqlisting-38-21(52288)B.txt

```

<212> DNA
<213> artificial sequence

<220>
<221> misc_feature
<222> (1)..(206)

<400> 7
tgagggatca agccacagca gccactcga ctttctagcc gaccagacg agccaaggga      60
tcttttttggga atgctgctcc gtcgtcaggc tttccgacgt ttgggtgggtt gaacagaagt    120
cattatcgca cggaatgcc agcactcccg aggggaaccc tgtggttggc atgcacatac      180
aaatggacga acggataaac ccttttc                                           206

<210> 8
<211> 307
<212> DNA
<213> Gossypium hirsutum

<220>
<221> Unsure
<222> (1)..(307)
<223> 3' cotton (Gossypium hirsutum) genome sequence

<400> 8
tggaaaaata atcaacacca cgctcaacaa caacagaata ataatggggtt cttgttaggt      60
gaagttcaaa acacagggtat tcaagaactg tatcaaaggc tcaaatcatc atcaagttat    120
tactctgata cttcagcagt aattctaagc aatgtcgctt cttcttcac aacatccatt      180
ttggagtcag ctccagttgc tgggggagaa ttgggttact ggaatccggc attttcatca    240
tcgtggtctg atcttccaac aactaatggt gcatatcctt aaaataaccc tttacctttc    300
gtttaaat                                                                307

<210> 9
<211> 26
<212> DNA
<213> artificial sequence

<220>
<221> misc_feature
<222> (1)..(26)
<223> 5' cotton (Gossypium hirsutum) genome PCR primer

<400> 9
gagagagata ggcactaaag taagca                                           26

<210> 10
<211> 28
<212> DNA
<213> artificial sequence

<220>
<221> misc_feature

```

Seqlisting-38-21(52288)B.txt

<222> (1)..(28)
<223> 5' insert PCR primer

<400> 10
ttagacaaat tgtcacgggc taccagaa

28

<210> 11
<211> 24
<212> DNA
<213> artificial sequence

<220>
<221> misc_feature
<222> (1)..(24)
<223> 3' insert PCR primer

<400> 11
ttcccaacga tcaaggcgag ttac

24

<210> 12
<211> 27
<212> DNA
<213> artificial sequence

<220>
<221> misc_feature
<222> (1)..(27)
<223> 3' cotton (Gossypium hirsutum) genome PCR primer

<400> 12
ttgatgcact tacgaaagaa gaaccga

27

<210> 13
<211> 905
<212> DNA
<213> artificial sequence

<220>
<221> misc_feature
<222> (1)..(905)
<223> 5' cotton (Gossypium hirsutum) genome + insert sequence

<400> 13
gtcccggggg cttatcctgt attcatttgc acccacataa acagccaaat taaccaaacc

60

catattcaac tgaaactccc aaagccattc ctacttttagc ttttcaccca ctaactcaaa

120

agaaaacact cacctagctt ctttgctttt tcttttggat tgttttagat ctacaaaaag

180

atgattcaag aactccttgg aggttcttct tgcttaaact ttggagggga gaggaagatc

240

tccatcaatg gaagcatttt ggaaggaacc cccacttctt ctccatcacc atcatcttct

300

tcttcttcgg cgacgacttc atcgaccact aattcatcga atccggagaa tcatcaccag

360

aatttgaggt gccccaggtg tgattcctcc aacacaaagt tctgctatta caacaactac

420

Seqlisting-38-21(52288)B.txt

```

aacctcactc agcctcgtca cttttgcaag acttgccgtc ggtattggac caaaggagga 480
gctctcagaa acgttcctat tgggtggtggg tgtaggaaaa acaaaagcac tactggtggt 540
tcaacatctc tggggaaatc aacttcttcc aagatgaaaa cagtagtttc tgaaattgga 600
agatctgggt tcgatcatga gcttcagtct actccaattc tttggacttc agcggcccag 660
acttcccatc ttctatccaa tctaacctca atgagagcta ccctaaacct taaccctaac 720
acattgtcta accctgttag tattaaggaa gaagtgaagt tgcttggaac ctgatagttt 780
aaactgaagg cgggaaacga caatctgac ccagcttgca tgctgcagg tcaattcaat 840
attgtggcag gacattgcta catgatacct cttagaattg tttagacttc agatcgatct 900
tgtca 905

```

```

<210> 14
<211> 513
<212> DNA
<213> artificial sequence

<220>
<221> misc_feature
<222> (1)..(513)
<223> 3' cotton (Gossypium hirsutum) genome + insert sequence

```

```

<400> 14
tgagggatca agccacagca gccactcga cttctagcc gaccagacg agccaaggga 60
tctttttgga atgctgctcc gtcgtcaggc tttccgacgt ttgggtggtt gaacagaagt 120
cattatcgca cggaatgcca agcactcccg aggggaacct tgtggttggc atgcacatac 180
aaatggacga acggataaac cttttctgga aaaataatca acaccacgct caacaacaac 240
agaataataa tgggttcctt gtaggtgaag ttcaaaacac aggtattcaa gaactgtatc 300
aaaggctcaa atcatcatca agttattact ctgatacttc agcagtaatt ctaagcaatg 360
tcgcttcttc ttcatcaaca tccattttgg agtcagctcc agttgctggg ggagaattgg 420
gttactggaa tccggcattt tcatcatcgt ggtctgatct tccaacaact aatggtgcat 480
atccttaaaa taacccttta cctttcgttt aat 513

```

```

<210> 15
<211> 4973
<212> DNA
<213> artificial sequence

<220>
<221> misc_feature
<222> (1)..(4973)
<223> sequence of 5' flank to full-length cry1Ac coding region

```

```

<400> 15
cggcccagac ttcccatctt ctatccaatc taacctcaat gagagctacc ctaaacccta 60

```

Seqlisting-38-21(52288)B.txt

accctaacac attgtctaac cctgttagta ttaaggaaga agtgagtttg cttggacact	120
gatagtttaa actgaaggcg ggaaacgaca atctgatccc agcttgcatg cctgcaggtc	180
aattcaatat tgtggcagga cattgctaca tgatacctct tagaattgtt tagacttcag	240
atcgatcttg tcagtctgaa agacccaaaa acaaatgcaa tttcttttct ggtagaccgt	300
gacaatttgt ctaagatgta tctgatttaa tgccttttgt atataatata ctcatcta	360
ctagttaatt tagcttcaga gtaaattact tcagcatatt tatacgtgcc aagtgccaac	420
catatcaaat tagctaagca gacagttgaa gtacacaaaa caaaagcatc atatgctgat	480
ttattttattc atagatggag ctcaagtcac agttaaatag cccgatactt tcctcgtc	540
ctatgagcta ttacagcata catttttagta ctacatactt attcagtaaa aagccctcaa	600
aattgaagac aaaggacggg atccccgggt accgagctcg aattcaggcc tctagatctc	660
attattcctc catcaagaga agctccacgc tgtccacgat gaaggttccc tcggtttcac	720
cgatctcgat ccacactttg tcggtctcag gaaagtactc aagctccttg gtaacatagc	780
caactggaag tgggtgtgag tccctgtaac ctctgttgaa ctgcgaaggg ttctcacgtc	840
tgccatctgt gtaggatttc tcctcgtaca cggaggcata gtcagcagga acggaaggag	900
cttcgttgta acctctgtta cggctagtgt aggcacctcc gtactcttcc tgattcacag	960
tgtagtcgtt gcaagtaacg gtgtgtgtgg gatagatttc ttctcgcacg cagtgggaga	1020
acttaagctc gtccgtgttg ttctcgcacg cgtggatggc cagcgaacct tcaccgtatc	1080
cctccttgta agcggtcaca cggagaatgt agcctctacc tggacagact ctaacctctt	1140
gggacacttc agcttccac tcaggcacia ccaggacgga acgctgattg ttctgttctt	1200
ccacgtccac atgaccttc acattccagc agctgaggcc attgttgaag tcaccgttct	1260
tgatgacgtt tctggcatcg tacaaggaga atgcggtaaa gatacgtccc tcaagttcct	1320
cgaagatggc agcgttcaca ccagggatca cggacaactc aggcaagtaa gcctcacgaa	1380
tgctgtgcac acgtttgtct gcggcgtgga tcatggcgat gttgggtgtcg gcttgcaact	1440
gatcatattg ggagttcacg aacaaagcat ccacggactc tttggcctcc ttgtaaacga	1500
tgttagtttc ccattcgagt ttctcacggt tgtccctcca cttcttctct gctctcttca	1560
cacgagcgag agcttcaccg accaatgggt tctcttcgag aaactcaagg ttgccaagtc	1620
ttgcgtgtcc gtcttgggtc ttgatcttga agatgacca gactccgagg tcctcattca	1680
ggtcagtaca tccacatcg atgtccaagg agaagtgatg agaatgggtg gcacacttct	1740
cgccatccct gcaggagcag tccaagtcag gattccactc aagggtgtgga gcgcatctgt	1800
taggctctcc acacttccca atgggagatt gggcagaaag tggccagagg gaaccagtac	1860
ctgggacatt cagggtctcg tgcttggcat tgtacctgat cgagtagatt tcaaggctct	1920
ggctgtcttc gatgtagcct ctaagttgat acctggtgaa ggctttgagt ttggactcat	1980

Seqlisting-38-21(52288)B.txt

cgatcttctg gtacaagtag gtagggtagc actcgtcgaa agttccggag aggggtgacgt 2040
 agttctcctt gaacacatcg tcgcctcctt ggatggtgat cccggtgctt ccaccccaac 2100
 cacgttctgg ctgcctgttg atgtctttga agttggagtc ttgcaagaga ttcctctcgt 2160
 cgctgagacg cttggcgtgt ttaactttct cggagagttc acgcttctcg tcgaggcaga 2220
 actcatcgct aaggtaggtg accaagttgg acacttggtc aatgtgatag tcagtaacgt 2280
 tagttttcaa gccaaactga ttggtggagg taaagagggc gttcacagcc ttctgggctc 2340
 tctcaagggt gtactcagcc tcgagtgttg cagtaactgg aatgaactcg aatctgtcga 2400
 taatcactcc tgcagtccca ctaaagtttc taacacccac gatgttaccg agtgaagatg 2460
 taaaagcatt ggcactttca aagtaaccga aatcgctgga ttggagatta tccaaggagg 2520
 tagctgtagc tggaactgta ttggagaaga tggatgaatt accccaatta acgttgaggt 2580
 gaataggggt cacagaagca tacctcacac gaactctata tctggtagat gtggatggga 2640
 agtgaattgg aacttcaata taccctctat tctgaatggt atttccactg ctgttgagtc 2700
 taacgaggtc tccaccagtg aatcctggtc ctgaaatgac agaaccgttg aagagaaagt 2760
 ttcccttcac tgcagggttg tgagtaatac tatcggatgc gatgatgttg ttgaactcag 2820
 cactacgatg tatccaagag aacataggag ctctgatgat gctcacggaa ctgttgctga 2880
 atccggaacg gaacatggac acgtggctca acctgtggga gaatccttgc ctgggtggca 2940
 cattgttggt ctgtggaaaa ggaagggtgc tcctacaaat gccatcattg cgataaagga 3000
 aaggccatcg ttgaagatgc ctctgccgac agtgggtccca aagatggacc cccaccacg 3060
 aggagcatcg tggaaaaaga agacgttcca accacgtctt caaagcaagt ggattgatgt 3120
 gatatctcca ctgacgtaag ggatgacgca caatcccact atccttcgca agacccttcc 3180
 tctatataag gaagttcatt tcatttggag aggacacgct gacaagctga ctctagcaga 3240
 tctccatgga caacaacca aacatcaacg aatgcattcc atacaactgc ttgagtaacc 3300
 cagaagttga agtacttggg ggagaacgca ttgaaaccgg ttacactccc atcgacatct 3360
 ccttgtcctt gacacagttt ctgctcagcg agttcgtgcc aggtgctggg ttcgttctcg 3420
 gactagttga catcatctgg ggtatctttg gtccatctca atgggatgca ttcttgggtc 3480
 aaattgagca gttgatcaac cagaggatcg aagagttcgc caggaaccag gccatctcta 3540
 ggttggaagg attgagcaat ctctaccaa tctatgcaga gagcttcaga gagtgggaag 3600
 ccgatcctac taaccagct ctccgagagg aatgcgtat tcaattcaac gacatgaaca 3660
 gcgccttgac cacagctatc ccattgttcg cagtccagaa ctaccaagtt cctctcttgt 3720
 ccgtgtacgt tcaagcagct aatcttcacc tcagcgtgct tcgagacgtt agcgtgtttg 3780
 ggcaaagggt gggattcgat gctgcaacca tcaatagccg ttacaacgac cttactaggc 3840
 tgattggaaa ctacaccgac cacgctgttc gttggtacaa cactggcttg gagcgtgtct 3900

Seqlisting-38-21(52288)B.txt

```

ggggtcctga ttctagagat tggattagat acaaccagtt caggagagaa ttgaccctca 3960
cagtttttga cattgtgtct ctcttcccgga actatgactc cagaacctac cctatccgta 4020
cagtgtccca acttaccaga gaaatctata ctaaccagtt tcttgagaac ttcgacggta 4080
gcttccgtgg ttctgcccga ggtatcgaag gctccatcag gagcccacac ttgatggaca 4140
tcttgaacag cataactatc tacaccgatg ctcacagagg agagtattac tgggtctggac 4200
accagatcat ggccctctcca gttggattca gcggggcccg gtttaccttt cctctctatg 4260
gaactatggg aaacgccgct ccacaacaac gtatcggtgc tcaactaggt caggggtgtct 4320
acagaacaaa cactgatagt ttaaactgaa ggcgggaaac gacaatctga tcccagcttg 4380
catgcctgca ggtcaattca atattgtggc aggacattgc tacatgatac ctcttagaat 4440
tgtttagact tcagatcgat cttgtcagtc tgaaagaccc aaaaacaaat gcaatttctt 4500
ttctggtaga ccgtgacaat ttgtctaaga tgtatctgat ttaatgcctt ttgtatataa 4560
tacactcadc taatctagtt aatttagctt cagagtaaata tacttcagca tatttatacg 4620
tgccaagtgc caaccatadc aaattagcta agcagacagt tgaagtacac aaaacaaaag 4680
catcatatgc tgatttattt attcatagat ggagctcaag tcatagttaa atagcccgat 4740
actttctctg ctcaactatga gctattacag catacatttt agtactacat acttattcag 4800
taaaaagccc tcaaaattga agacaaagga cgggatcccc ggggtaccgag ctgcaattca 4860
ggcctctaga tctcattatt cctccatcaa gagaagctcc acgctgtcca cgatgaaggt 4920
tccctcgggt tcaccgatct cgatccacac tttgtcggtc tcaggaaagt act 4973

```

```

<210> 16
<211> 19
<212> DNA
<213> artificial sequence

```

```

<220>
<221> misc_feature
<222> (1)..(19)
<223> 5' primer to 5' flanking sequence of SEQ ID NO: 15 from 8 to 26;

```

```

<400> 16
gacttcccat cttctatcc 19

```

```

<210> 17
<211> 19
<212> DNA
<213> artificial sequence

```

```

<220>
<221> misc_feature
<222> (1)..(19)
<223> 3' primer to partial e35S promoter of SEQ ID NO: 15 from 3154 to 3136

```


<400> 17
 attgtgcgtc atcccttac 19

<210> 18
 <211> 22
 <212> DNA
 <213> artificial sequence

<220>
 <221> misc_feature
 <222> (1)..(22)
 <223> 5'primer to partial 3' cry1Ac sequence of SEQ ID NO: 15 from 2581 to 2603

<400> 18
 gaataggggt cacagaagca ta 22

<210> 19
 <211> 20
 <212> DNA
 <213> artificial sequence

<220>
 <221> misc_feature
 <222> (1)..(20)
 <223> 3'primer to partial 5' cry1Ac sequence of SEQ ID NO: 15 from 3455 to 3435

<400> 19
 ggaccaaaga taccccagat 20

<210> 20
 <211> 19
 <212> DNA
 <213> artifical sequence

<220>
 <221> misc_feature
 <222> (1)..(19)
 <223> 5'primer to partial e35S promoter of SEQ ID NO: 15 from 2993 to 3011

<400> 20
 ataaaggaaa ggccatcgt 19

<210> 21
 <211> 25
 <212> DNA
 <213> artificial sequence

<220>
 <221> misc_feature
 <222> (1)..(25)
 <223> 3'primer to full-length cry1Ac sequence of SEQ ID NO: 15 from 4973 to 4949

25